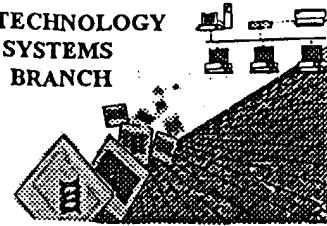


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/743,280
Source: 1 Fw 5
Date Processed by STIC: 10/8/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/743,280

DATE: 10/08/2004

TIME: 15:25:23

Input Set : A:\2488-1-008 Sequence listing US revised.txt
 Output Set: N:\CRF4\10082004\J743280.raw

```

3 <110> APPLICANT: Evolutec Limited
5 <120> TITLE OF INVENTION: Ion Channel Modulators
8 <130> FILE REFERENCE: 2488-1-008
11 <140> CURRENT APPLICATION NUMBER: 10/743,280
12 <141> CURRENT FILING DATE: 2003-12-22
14 <150> PRIOR APPLICATION NUMBER: PCT/GB02/002919
15 <151> PRIOR FILING DATE: 2002-06-21
17 <150> PRIOR APPLICATION NUMBER: GB0115363.4
18 <151> PRIOR FILING DATE: 2001-06-22
20 <160> NUMBER OF SEQ ID NOS: 69
22 <170> SOFTWARE: SeqWin99
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 18
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: PCR primer - T7
32 <400> SEQUENCE: 1
33 taatacgact cactatag
35 <210> SEQ ID NO: 2
36 <211> LENGTH: 18
37 <212> TYPE: DNA
38 <213> ORGANISM: Artificial Sequence
40 <220> FEATURE:
41 <223> OTHER INFORMATION: PCR primer - T3
43 <400> SEQUENCE: 2
44 aattaaccct cactaaag
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 20
48 <212> TYPE: DNA
49 <213> ORGANISM: Artificial Sequence
51 <220> FEATURE:
52 <223> OTHER INFORMATION: PCR primer - HF1
54 <400> SEQUENCE: 3
W--> 55 gaygartgyc crrnnttg h's MUST be explained ( see p.6)
57 <210> SEQ ID NO: 4
58 <211> LENGTH: 18
59 <212> TYPE: DNA
60 <213> ORGANISM: Artificial Sequence
62 <220> FEATURE:
63 <223> OTHER INFORMATION: PCR primer - HF2
65 <400> SEQUENCE: 4
W--> 66 gartgyccm gnatnrgy

```

*Does Not Comply
Connected Diskette Needed*

pp 1-3, 6

18

18

20

18

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/743,280

DATE: 10/08/2004
 TIME: 15:25:23

Input Set : A:\2488-1-008 Sequence listing US revised.txt
 Output Set: N:\CRF4\10082004\J743280.raw

68 <210> SEQ ID NO: 5
 69 <211> LENGTH: 17
 70 <212> TYPE: DNA
 71 <213> ORGANISM: Artificial Sequence
 73 <220> FEATURE:
 74 <223> OTHER INFORMATION: PCR primer - HF3
 76 <400> SEQUENCE: 5
 W--> 77 acatccggaa aycartg *P.6* 17
 79 <210> SEQ ID NO: 6
 80 <211> LENGTH: 20
 81 <212> TYPE: DNA
 82 <213> ORGANISM: Artificial Sequence
 84 <220> FEATURE:
 85 <223> OTHER INFORMATION: PCR primer - HR1
 87 <400> SEQUENCE: 6
 88 aatacaacat attcaagtgg 20
 90 <210> SEQ ID NO: 7
 91 <211> LENGTH: 31
 92 <212> TYPE: DNA
 93 <213> ORGANISM: Artificial Sequence
 95 <220> FEATURE:
 96 <223> OTHER INFORMATION: PCR primer - HF6
 98 <400> SEQUENCE: 7
 99 gtacggatcc atgaaaatttgccttgttcag t 31
 101 <210> SEQ ID NO: 8
 102 <211> LENGTH: 52
 103 <212> TYPE: DNA
 104 <213> ORGANISM: Artificial Sequence
 106 <220> FEATURE:
 107 <223> OTHER INFORMATION: PCR primer - HR3
 109 <400> SEQUENCE: 8
 110 catgctgcag ttagtgatgg tgatggat gacccttgca ctcgccatca tg 52
 112 <210> SEQ ID NO: 9
 113 <211> LENGTH: 19
 114 <212> TYPE: DNA
 115 <213> ORGANISM: Artificial Sequence
 117 <220> FEATURE:
 118 <223> OTHER INFORMATION: Primer - PFBR
 120 <400> SEQUENCE: 9
 121 gattatgatc ctcttagtac 19
 123 <210> SEQ ID NO: 10
 124 <211> LENGTH: 20
 125 <212> TYPE: DNA
 126 <213> ORGANISM: Artificial Sequence
 128 <220> FEATURE:
 129 <223> OTHER INFORMATION: Primer - PFBF
 131 <400> SEQUENCE: 10
 132 tattccggat tattcatacc 20
 134 <210> SEQ ID NO: 11

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/743,280

DATE: 10/08/2004

TIME: 15:25:23

Input Set : A:\2488-1-008 Sequence listing US revised.txt
 Output Set: N:\CRF4\10082004\J743280.raw

135 <211> LENGTH: 76
 136 <212> TYPE: PRT
 137 <213> ORGANISM: Hybomitra bimaculata
 139 <220> FEATURE:
 140 <221> NAME/KEY: SIGNAL
 141 <222> LOCATION: 1-20
 143 <400> SEQUENCE: 11
 144 Met Lys Phe Ala Leu Phe Ser Val Leu Val Val Leu Ile Ala Thr
 145 1 5 10 15
 147 Phe Val Ala Ala Asp Glu Cys Pro Arg Ile Cys Thr Ala Asp Tyr Arg
 148 20 25 30
 150 Pro Val Cys Gly Thr Pro Ser Gly Gly Arg Arg Ser Ala Asn Arg Thr
 151 35 40 45
 153 Phe Gly Asn Gln Cys Ser Leu Asn Ala His Asn Cys Leu Asn Lys Gly
 154 50 55 60
 156 Asp Thr Tyr Asp Lys Leu His Asp Gly Glu Cys Lys
 157 65 70 75
 159 <210> SEQ ID NO: 12
 160 <211> LENGTH: 331
 161 <212> TYPE: DNA
 162 <213> ORGANISM: Hybomitra bimaculata
 164 <220> FEATURE:
 165 <221> NAME/KEY: CDS
 166 <222> LOCATION: 56-285
 168 <400> SEQUENCE: 12
 W--> 169 *gttttagttca gttttatag taaccagttc taaaagttta ataacat*⁶⁰*aa tcaaaatgaa*
 170 *atttgccttg ttcaagtgttt tagttgttct gctgattgca acatttggat*¹²⁰*cgatgtga*
 171 *atgcccacgt atttgcacgg ctgactatag accggtatgc ggcactccct ctgggtgtcg*¹⁸⁰
 172 *ccgaaatgtgca aacaggactt ttggaaacca atgtagccctc aacgcccaca actgcttgaa*²⁴⁰
 173 *caaggggat acttacgaca aactgcata tggcgagtgc aagtaaaaag gacaagtccc*³⁰⁰
 174 *aggaatatta ttgactccac ttgaatatgt a*³³¹
 176 <210> SEQ ID NO: 13
 177 <211> LENGTH: 61
 178 <212> TYPE: PRT
 179 <213> ORGANISM: Artificial Sequence
 181 <220> FEATURE:
 182 <223> OTHER INFORMATION: Kazal-type inhibitor consensus
 184 <400> SEQUENCE: 13
 185 Cys Ser Arg Tyr Pro Asn Pro Thr Ser Lys Asp Gly Lys Leu Val Ala
 186 1 5 10 15
 188 Cys Pro Arg Glu Tyr Asp Pro Val Cys Gly Ser Asp Gly Val Thr Tyr
 189 20 25 30
 191 Ser Asn Glu Cys Glu Leu Lys Lys Ala Ala Cys Ala Glu Asn Val Glu
 192 35 40 45
 194 Gln Gly Thr Asn Ile Glu Lys Lys His Asp Gly Pro Cys
 195 50 55 60
 198 <210> SEQ ID NO: 14
 199 <211> LENGTH: 7
 200 <212> TYPE: PRT

P.6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/743,280

DATE: 10/08/2004

TIME: 15:25:23

Input Set : A:\2488-1-008 Sequence listing US revised.txt
 Output Set: N:\CRF4\10082004\J743280.raw

201 <213> ORGANISM: Hybomitra bimaculata
 203 <400> SEQUENCE: 14
 204 Pro Ser Gly Gly Arg Arg Ser
 205 1 5
 207 <210> SEQ ID NO: 15
 208 <211> LENGTH: 43
 209 <212> TYPE: PRT
 210 <213> ORGANISM: Rhodnius prolixus
 212 <400> SEQUENCE: 15
 213 Cys Ala Cys Pro His Ala Leu His Arg Val Cys Gly Ser Asp Gly Glu
 214 1 5 10 15
 216 Thr Tyr Ser Asn Pro Cys Thr Leu Asn Val Ala Lys Phe Gly Lys Glu
 217 20 25 30
 219 Pro Glu Leu Val Lys Val His Asp Gly Pro Cys
 220 35 40
 222 <210> SEQ ID NO: 16
 223 <211> LENGTH: 45
 224 <212> TYPE: PRT
 225 <213> ORGANISM: Rhodnius prolixus
 227 <400> SEQUENCE: 16
 228 Cys Gln Glu Cys Asp Gly Asp Glu Tyr Lys Pro Val Cys Gly Ser Asp
 229 1 5 10 15
 231 Asp Ile Thr Tyr Asp Asn Asn Cys Arg Leu Glu Cys Ala Ser Ile Ser
 232 20 25 30
 234 Ser Ser Pro Gly Val Glu Leu Lys His Glu Gly Pro Cys
 235 35 40 45
 237 <210> SEQ ID NO: 17
 238 <211> LENGTH: 45
 239 <212> TYPE: PRT
 240 <213> ORGANISM: Anemonia sulcata
 242 <400> SEQUENCE: 17
 243 Cys Pro Leu Ile Cys Thr Met Gln Tyr Asp Pro Val Cys Gly Ser Asp
 244 1 5 10 15
 246 Gly Ile Thr Tyr Gly Asn Ala Cys Met Leu Leu Gly Ala Ser Cys Arg
 247 20 25 30
 249 Ser Asp Thr Pro Ile Glu Leu Val His Lys Gly Arg Cys
 250 35 40 45
 252 <210> SEQ ID NO: 18
 253 <211> LENGTH: 46
 254 <212> TYPE: PRT
 255 <213> ORGANISM: Gallus gallus
 257 <400> SEQUENCE: 18
 258 Cys Lys Lys Thr Ala Cys Pro Val Val Val Ala Pro Val Cys Gly Ser
 259 1 5 10 15
 261 Asp Tyr Ser Thr Tyr Ser Asn Glu Cys Glu Leu Glu Lys Ala Gln Cys
 262 20 25 30
 264 Asn Gln Gln Arg Arg Ile Lys Val Ile Ser Lys Gly Pro Cys
 265 35 40 45
 267 <210> SEQ ID NO: 19

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/743,280

DATE: 10/08/2004

TIME: 15:25:23

Input Set : A:\2488-1-008 Sequence listing US revised.txt
 Output Set: N:\CRF4\10082004\J743280.raw

268 <211> LENGTH: 49
 269 <212> TYPE: PRT
 270 <213> ORGANISM: Homo sapiens
 272 <400> SEQUENCE: 19
 273 Cys Ser Gln Tyr Arg Leu Pro Gly Cys Pro Arg His Phe Asn Pro Val
 274 1 5 10 15
 276 Cys Gly Ser Asp Met Ser Thr Tyr Ala Asn Glu Cys Thr Leu Cys Met
 277 20 25 30
 279 Lys Ile Arg Glu Gly Gly His Asn Ile Lys Ile Ile Arg Asn Gly Pro
 280 35 40 45
 282 Cys
 285 <210> SEQ ID NO: 20
 286 <211> LENGTH: 45
 287 <212> TYPE: PRT
 288 <213> ORGANISM: Gallus gallus
 290 <400> SEQUENCE: 20
 291 Cys Asp Phe Thr Cys Leu Ala Val Pro Arg Ser Pro Val Cys Gly Ser
 292 1 5 10 15
 294 Asp Asp Val Thr Tyr Ala Asn Glu Cys Glu Leu Lys Lys Thr Arg Cys
 295 20 25 30
 297 Glu Lys Arg Gln Asn Leu Val Thr Ser Gln Gly Ala Cys
 298 35 40 45
 300 <210> SEQ ID NO: 21
 301 <211> LENGTH: 46
 302 <212> TYPE: PRT
 303 <213> ORGANISM: Rattus norvegicus
 305 <400> SEQUENCE: 21
 306 Cys Asp Phe Ser Cys Gln Ser Val Pro Arg Ser Pro Val Cys Gly Ser
 307 1 5 10 15
 309 Asp Gly Val Thr Tyr Gly Thr Glu Cys Asp Leu Lys Lys Ala Arg Cys
 310 20 25 30
 312 Glu Ser Gln Gln Glu Leu Tyr Val Ala Ala Gln Gly Ala Cys
 313 35 40 45
 315 <210> SEQ ID NO: 22
 316 <211> LENGTH: 47
 317 <212> TYPE: PRT
 318 <213> ORGANISM: Homo sapiens
 320 <400> SEQUENCE: 22
 321 Cys Ala Pro Asp Cys Ser Asn Ile Thr Trp Lys Gly Pro Val Cys Gly
 322 1 5 10 15
 324 Leu Asp Gly Lys Thr Tyr Arg Asn Glu Cys Ala Leu Leu Lys Ala Arg
 325 20 25 30
 327 Cys Lys Glu Gln Pro Glu Leu Glu Val Gln Tyr Gln Gly Arg Cys
 328 35 40 45
 330 <210> SEQ ID NO: 23
 331 <211> LENGTH: 46
 332 <212> TYPE: PRT
 333 <213> ORGANISM: Gallus gallus
 335 <400> SEQUENCE: 23

6

VARIABLE LOCATION SUMMARY
PATENT APPLICATION: US/10/743,280

DATE: 10/08/2004
TIME: 15:25:24

Input Set : A:\2488-1-008 Sequence listing US revised.txt
Output Set: N:\CRF4\10082004\J743280.raw

Use of n's or Xaa's(NEW RULES) :

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which
residue n or Xaa represents.

Seq#:3; N Pos. 12,15,18

Seq#:4; N Pos. 9,12,15

Seq#:5; N Pos. 3,9

Seq#:12; N Pos. 48

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/743,280

DATE: 10/08/2004

TIME: 15:25:24

Input Set : A:\2488-1-008 Sequence listing US revised.txt
Output Set: N:\CRF4\10082004\J743280.raw

L:55 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:3
L:55 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:3
L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:66 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:4
L:66 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:4
L:66 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:77 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:5
L:77 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:5
L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:169 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:12
L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0